WHAT IS CLAIMED IS:

1. An electric transformer winding comprising:

(a) at least one plate of electric insulating material with a hole bored in the middle; and

(b) an electric conductor placed on at least one side of the plate and spiral-wound, the turns of which are electrically insulated from one another.

2. The electric winding according to claim 1 wherein the plate presents a spiral-shaped groove in which the electric conductor is accommodated.

3. The electric winding according to claim 1 wherein the plate is made of a material having a high thermal conductivity.

4. The electric winding according to one of claim 1 comprising a plurality of juxtaposed plates, each bearing a spiral-wound electric conductor, and in that the spirals of the electric conductor present an identical gyration, but are wound from outside in on one plate and from inside out on the adjacent plate.

5. The electric winding according to one of claim 2 comprising a plurality of juxtaposed plates, each bearing a spiral-wound electric conductor, and in that the spirals of the electric conductor present an identical gyration, but are wound from outside in on one plate and from inside out on the adjacent plate.

6. The electric winding according to one of claim 1 compriseing a plurality of juxtaposed plates, each bearing a spiral-wound electric conductor, and in that the spirals of the electric conductor present an identical gyration, but are wound from outside in on one plate and from inside out on the adjacent plate.

7. The electric winding according to claim 4 wherein one plate presents a notch at the outer point of the spiral, while the adjacent plate presents a notch at the inner point of the spiral, so as to make the conductor pass from one plate to the adjacent plate on the coil winding operation.

8. The electric winding according to claim 5 wherein one plate presents a notch at the outer point of the spiral, while the adjacent plate presents a notch at the inner point of the spiral, so as to make the conductor pass from one plate to the adjacent plate on the coil winding operation.

9. The electric winding according to claim 6 wherein one plate presents a notch at the outer point of the spiral, while the adjacent plate presents a notch at the inner point of the spiral, so as to make the conductor pass from one plate to the adjacent plate on the coil winding operation.

10. The electric winding according to claim 1 wherein the electric conductor is of circular section.

11. The electric winding according to claim 2 wherein the bottom of the groove has the shape of a semicircle.

12. The electric winding according to claim 2 wherein the bottom of the groove is flat.

13. The electric winding according to claim 1 wherein the plate has the shape of a disk, the periphery of which is circular.

14. The electric winding according to claim 1 wherein the plate has the shape of a disk, the periphery of which is oval.

15. The electric winding according to claim 1 wherein the plate has the shape of a disk, the periphery of which is rectangular with rounded corners.

16. The electric winding according to claim 1 wherein the bore of the plate has a contour adapted to that of the support on which it is mounted.

17. The electric winding according to claim 1 wherein the sides of each of each plate comprise means for assembling the adjacent disks to one another and maintaining a filling space between them for an electric insulator of high thermal conductivity.

18. The electric winding according to claim 17 wherein the electric insulator of high thermal conductivity which fills the space is in solid form at the temperature of use.

19. The electric winding according to claim 17 wherein the winding is placed in a closed container filled with an electric insulating fluid of high thermal conductivity.

20. A method for obtaining an electric winding comprising the steps of:

(a) fabricating a first plurality of plates each comprising on one side a spiral groove and a central bore, the spiral groove extending from the central bore to the periphery of the plate;

(b) fabricating a second plurality of plates, each comprising on one side a spiral groove and a central bore, the spiral groove extending from the periphery of the plate to the central bore;

(c) passing an electric conductor inside the bores of the plates of the first plurality;

(d) fastening a plate of the first plurality of plates on a mandrel;

(e) turning the mandrel in order to set the electric conductor in place in the groove, starting from the central bore;

(f) stopping the rotation of the mandrel, when the electric conductor comes to the outer end of the spiral,

(g) fastening a plate of the second plurality of plates on the mandrel;

(h) turning the mandrel in order to set the electric conductor in place in the groove, starting from the outer end of the spiral,

(i) stopping the rotation of the mandrel when the electric conductor ends at the central bore,

(j) repeating steps (d) to (i) until obtaining the winding on the plates of both pluralities of plates.

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